

**REMARKS**

**I. Introduction**

Claims 1-50 have been examined. Claims 2, 18, 20-25, 34, 36 and 38-46 are allowed. Furthermore, the Examiner acknowledges that claims 9, 13, 17, 27-31, 33, 35, 37 and 48-50 contain allowable subject matter. However, the Examiner rejects claims 1, 3-8, 10-12, 14-16, 19, 26, 32, 47 and 50.

Specifically, claims 16 and 50 stand rejected under 35 U.S.C. § 112, second paragraph; claims 1, 3-8 and 10-12 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Takata, U.S. Patent No. 5,631,682 (hereinafter "Takata"); claim 14 stands rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Ishinaga et al., U.S. Patent No. 6,336,719 (hereinafter "Ishinaga"); claims 14-16 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Shinada et al., U.S. Patent No. 5,790,158 (hereinafter "Shinada"); claim 32 stands rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Matsuzaki et al., U.S. Patent No. 6,416,152 (hereinafter "Matsuzaki"); and claims 19, 26 and 47 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by newly cited Nozawa et al., U.S. Patent No. 6,102,533 (hereinafter "Nozawa"). Additionally, the Examiner objects to the specification.

By way of overview, Applicants overcome the § 112, second paragraph, rejections of claims 16 and 50, overcome the art rejections of claims 1, 3-8, 10-12, and 14-16, traverse the art rejection of claim 32, and cancel claims 19, 26 and 47.

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## **II. Allowable Subject Matter**

Claims 2, 18, 20-25, 34, 36 and 38-46 are allowed. Additionally, the Examiner objects to claims 9, 13, 17, 27-31, 33, 35, 37 and 48-50 as being dependent upon a rejected base claim, but acknowledges that claims 9, 13, 17, 27-31, 33, 35, 37 and 48-50 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (with claim 50 amended to overcome the § 112, second paragraph, rejection).

Applicants rewrite claims 9, 13, 17, 27-31, 35 and 37 in independent form, thereby placing these claims in condition for immediate allowance. Applicants withhold rewriting claims 33 and 48-50 in independent form at this time, pending the Examiner's consideration of the remarks relating to claims 14 and 16, as set forth below.

Applicants respectfully submit that the reasons for allowance set forth in the Examiner's Statement of Reasons for Allowance (*see* Office Action, pages 9-10) are merely exemplary in nature and that each of the allowed/allowable claims is allowed/allowable, as a whole, based on the entirety of the features recited therein.

## **III. Claim Rejections – 35 U.S.C. § 112, Second Paragraph**

Claims 16 and 50 stand rejected under § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the Examiner alleges that in claim 16, the relationship between the ink chamber (line 3) and the internal space (line 5) of the container body is not recited. The Examiner asks "is there a relationship between the ink chamber and the first and second divided chambers"?

In claim 16, an internal space of the container body is divided into two isolated areas by an area wall running parallel to an ink supply ports arrangement. A first isolated area is further subdivided into sub-areas by chamber walls, with each sub-area being provided with one of the ink supply ports (*see, e.g.*, Applicants' Fig. 14). Thus, each of these sub-areas can represent an ink chamber. Furthermore, the second isolated area can also include an ink supply port and represent an ink chamber (*see, e.g.*, Applicants' Fig. 13). For example, the second isolated area can contain reserve ink, as recited in claim 16.

Thus, Applicants respectfully submit that claim 16 requires that the ink chambers formed by the subdivision of the internal space of the container body each have an ink absorbing member for absorbing ink in the ink chambers. Applicants amend claim 16 to further clarify these aspects.

With respect to claim 50, the Examiner indicates that "said second direction" lacks antecedent basis. Applicants amend claim 50 to depend from claim 49, thereby correcting the antecedent basis problem. Furthermore, Applicants amend claim 49 to more properly depend from claim 48.

Applicants respectfully submit that the aforementioned claim amendments are not intended to narrow the scope of the original claims, but are rather for precision of language and to explicitly recite within the claim what was believed to have already been implicitly defined therein. Accordingly, these amendments do not foreclose application of reasonable equivalents.

**IV. Claim Rejections -- 35 U.S.C. § 102**

Takata

Claims 1, 3-8 and 10-12 stand rejected under § 102(b) as allegedly being anticipated by Takata. In particular, the Examiner alleges that Takata discloses a spacer 32 including a base portion which faces the lid member (body of 32 has surface facing lid 24) and a pressing portion (bottom surface of 32) for pressing said ink absorbing member 30 toward said ink supply port (Takata: Fig. 1). According to the Examiner, since film 34 wraps tightly around foam 30 and spacer 32, the bottom surface of spacer 32 presses against foam 30 (Takata: col. 3, line 67 to col. 4, line 2).

Applicants amend claim 1 to recite that the spacer has "a pressing portion which is substantially perpendicular to said base portion and extends from said base portion toward said ink absorbing member for pressing said ink absorbing member toward said ink supply port", thereby overcoming the rejection of claim 1.

Ishinaga

Claim 14 stands rejected under § 102(e) as allegedly being anticipated by Ishinaga. The Examiner alleges that Ishinaga discloses an internal space of said container body is divided into a plurality of areas by walls such that at least one of said areas stores ink 101 and at least one of said areas is isolated from the stored ink (Ishinaga: Fig. 1). According to the Examiner, even though there is communication between areas 101 and 103 via communication channel 110, area 103 can be said to be isolated from area 101 in the sense that area 103 is separated from area 101 by wall 111 (*see* Office Action, pages 11-12). Applicants respectfully disagree.

For example, claim 14 recites that "an internal space of said container body is divided into a plurality of areas by walls" and that "at least one of said areas stores ink and at least one of said areas is isolated from the stored ink". Contrary to the Examiner's allegations, neither area 101 nor area 103 is isolated from the ink shared between these areas via communication channel 110. Indeed, Ishinaga describes that "ink is moved from the ink containing portion 103 via the communication channel 110 to the ink holding member 102 [of area 101]" (Ishinaga: col. 13, lines 59-62).

However, in the interest of expediting prosecution, Applicants amend claim 14 to further clarify that "an internal space of said container body is divided into a plurality of discrete areas by walls". Applicants respectfully submit that these claim amendments are not intended to narrow the scope of the original claims, but are rather for precision of language and to explicitly recite within the claim what was believed to have already been implicitly defined therein. Accordingly, these amendments do not foreclose application of reasonable equivalents.

Areas 101 and 103 of Ishinaga are clearly not discrete areas in that they are connected (and communicate with one another) by communication channel 110. Consequently, claim 14 is not anticipated by Ishinaga.

Shinada

Claims 14-16 stand rejected under § 102(e) as allegedly being anticipated by Shinada. The Examiner alleges that Shinada discloses that an internal space of said container body is divided into a plurality of areas 511, 512 by walls 510 such that at least one of said areas 511 stores ink and at least one of said areas 512 is isolated from the stored ink (Shinada: Fig. 15).

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According to the Examiner, even though there is communication between areas 511 and 512 via communicating hole 519, area 512 can be said to be isolated from area 511 in the sense that area 512 is separated from area 511 by wall 510 (*see* Office Action, page 12). Applicants respectfully disagree.

For example, as noted above, claim 14 recites that "an internal space of said container body is divided into a plurality of areas by walls" and that "at least one of said areas stores ink and at least one of said areas is isolated from the stored ink" (*see also* claim 16).

The Examiner's position is flawed in that neither area 511 nor area 512 can be said to be isolated from the stored ink. Indeed, area 512 is an ink chamber for storing ink (Shinada: col. 13, lines 22-23). Furthermore, area 511 is a foam chamber for housing a porous member 520 (Shinada: col. 13, lines 21-22). Shinada describes that ink flows from the ink chamber 512 into the porous member 520 of area 511 through the communication hole 519 (Shinada: col. 17, lines 24-35).

However, as noted above, Applicants amend claim 14 to further clarify that "an internal space of said container body is divided into a plurality of discrete areas by walls". Applicants amend claim 16 in a similar fashion. Specifically, Applicants amend claim 16 to recite that "said first divided chamber is further divided into a plurality of discrete areas by chamber walls perpendicular to said area wall, and each of said discrete areas is provided with one of said ink supply ports". Applicants respectfully submit that these claim amendments are not intended to narrow the scope of the original claims, but are rather for precision of language and to explicitly

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recite within the claim what was believed to have already been implicitly defined therein.

Accordingly, these amendments do not foreclose application of reasonable equivalents.

Because Shinada fails to disclose or suggest the formation of discrete areas, as recited in claims 14 and 16, claims 14 and 16 are not anticipated by Shinada. Consequently, claim 15 is not anticipated by Shinada at least by virtue of its dependency.

Matsuzaki

Claim 32 stands rejected under § 102(e) as allegedly being anticipated by Matsuzaki.

The Examiner alleges that Matsuzaki discloses a spacer (as a projection suspended from the top wall) inserted between the lid 22 and the ink absorbing member 24 for pressing the ink absorbing member toward the ink supply port 21 (Matsuzaki: Fig. 8). Applicants respectfully disagree.

In Matsuzaki, any projections referred to by the Examiner protrude from lid 22 itself, which the Examiner mischaracterizes as a top wall (Matsuzaki: col. 3, lines 36-38; and Figs. 2 and 8). Thus, such projections do not correspond to "a spacer inserted between said lid member and said ink absorbing member", as recited in claim 32. Consequently, claim 32 is not anticipated by Matsuzaki.

Nozawa

Claims 19, 26 and 47 stand rejected under § 102(e) as allegedly being anticipated by Nozawa. Claims 19, 26 and 47 are canceled without prejudice or disclaimer.

**V. Formal Matter -- Objections to the Specification**

The Examiner objects to the specification as allegedly failing to provide proper antecedent basis for the claimed subject matter (*see* 37 C.F.R. § 1.75(d)(1) and MPEP §

608.01(o)). In particular, the Examiner alleges that the feature of re-inserting the ink cartridge into the ink jet recording apparatus in a second direction which is different from a first direction, as recited in claims 49 and 50 is not described in the specification.

Applicants respectfully submit that sufficient support for the features of claims 49 and 50 can be found in Applicants' Specification. For example, Fig. 13 illustrates an ink supply port 55' being formed in a cavity 53b of the ink cartridge in addition to the ink supply port 55 formed in the ink storing chamber 53a of the ink cartridge (*see* page 19, lines 6-14). Additionally, an air communicating port 57' is formed in the cavity 53b of the ink cartridge in addition to the air communicating port 57 formed in the ink storing chamber 53a of the ink cartridge (*Id.*). Thus, reserve ink can be stored in the cavity 53b such that if ink in the ink storing chamber 53a is consumed or the effective date of the cartridge after opening the seal expires, the stored reserve ink can be used (*Id.*).

Given the symmetric design of the ink cartridge illustrated in Fig. 13, one of ordinary skill in the art would recognize that one exemplary approach to using the reserve ink stored in the cavity 53b is to mount the ink cartridge in such a manner that an ink supply needle, *e.g.*, ink supply needle 62 of Fig. 12, engages the ink supply port 55' of the cavity 53b instead of the ink supply port 55 of the ink storing chamber 53a. Indeed, claim 16, from which claims 49 and 50 each depend, expressly recites that "said reserve ink is supplied to said recording head".

Claim 49 merely recites an operation of mounting the ink cartridge in this manner. In other words, mounting the ink cartridge such that the ink stored in the ink storing chamber 53a is used involves inserting the ink cartridge in a first direction. Conversely, mounting the ink



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cartridge such that the reserve ink stored in the cavity 53b is used involves inserting the ink cartridge in a second direction. Similarly, claim 50 recites that the first direction is opposite to the second direction.

In view of the above, Applicants respectfully submit that Applicants' full disclosure provides proper antecedent basis for the subject matter of claims 49 and 50. Consequently, the Examiner is requested to withdraw the objections to the specification.

## **VI. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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